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P.J. OAT
08/29/01

IN THE UNITED STATE PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of:

Baker

Serial No.: 09/061,017

Filed: April 15, 1998

For: METHOD AND APPARATUS OF
INTERLEAVING A DATA STREAM

Art Unit: 2732

Examiner: D. Vincent

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Honorable Commissioner of
Patents and Trademarks
Washington, D.C. 20231

REPLY BRIEF
IN SUPPORT OF APPELLANT'S APPEAL
TO THE BOARD OF PATENT APPEALS AND INTERFERENCES

Dear Sir:

Pursuant to 37 C.F.R. §193(b)(1), Appellant hereby replies to the Examiner's Answer
dated June 14, 2001.

Claims 1-19 are the subject of this appeal. The Examiner has maintained the rejections of
claims 1-19. Claims 1-3, 6-9, and 11-19 stand rejected under 35 U.S.C. 103(a) as being
unpatentable over U.S. Patent No. 5,291,485 by Afify et al. (hereinafter, "Afify"). Claims 4, 5,
and 10 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Afify in view of U.S.
Patent 5,825,772 by Dobbins et al. (hereinafter, "Dobbins").

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All arguments in Appellant's previously filed Appeal Brief, Reply Brief and Supplemental Appeal Brief are herein incorporated into this Reply Brief to the Examiner's Answer.

It is noted that while in many respects the issues in this case are relatively simple, the case has been made more complex and confusing by irregularities that have occurred previously. In particular, the Examiner filed a reply to Appellant's previous reply brief, which was and is not proper. Furthermore, the Examiner attempted to improperly rely on official notice when, during prosecution, Appellant correctly and properly traversed the Examiner's position regarding the meaning of "burst." Therefore, to address these procedural irregularities by the Examiner, prosecution on the merits was reopened.

Rather than focus on these procedural issues, however, Appellant wishes to focus the Board on the merits of the case, because the merits are relatively straight-forward.

As indicated above, the Examiner has rejected claims 1-3, 6-9, and 11-19 under 35 USC 103(a) on Afify alone. However, the Examiner has conceded that aspects of claims 1, 12, and 18 are not contained within Afify. Hence, the Examiner posed the rejection based on 103(a) rather than 102. (See Examiner's Answer, page 5). In addition to the Examiner's own concession that claim 1, as one example, does not address groupings, there are several other aspects of claim 1, again, for example, that Afify fails to provide.

In particular, despite the Examiner's assertions to the contrary (see Examiner's Answer, page 10), Afify does not teach "applying at least one grouping to the second MUX between applying groupings from the first MUX to the second MUX." Without rehashing all of the arguments previously made in prior prosecution, this is clear at least because Afify is not related to interleaving a data stream as claimed and described. **Afify makes it clear that it is related to reformatting of data, not interleaving, as recited in the claims.**

Although the claimed subject matter is not necessarily limited to the embodiments described, reference to the specification in this case is helpful to at least highlight that Afify is not related to interleaving, while the claimed subject matter is. For example, the present application states on page 4, lines 25-24, to page 5, line 1:

"[T]his particular embodiment of a circuit for interleaving a data stream **includes the capability to interleave a grouping or groupings of binary digital signals.** ...

In this particular embodiment, MUX 130 receives input signals from an alternative data source. **This data source or data stream is to be interleaved with the data stream written to FIFO 110,** as previously described."(emphasis supplied)

It is noted that this language from the specification is consistent with the language of the claim cited above.

In contrast, at column 2, lines 58-60, Afify states:

“An object of the present invention is to translate virtual words in one format to virtual words in another format.”

This is just one example of language from Afify that makes it clear that it is limited to reformatting data.

The Examiner views multiplexing and interleaving as the same thing (see Examiner’s Answer, pages 9,10); however, that is clearly not the case. Appellant agrees that a form of multiplexing is employed in Afify. Furthermore, multiplexing is also a technique for implementing the claimed subject matter in this embodiment. In contrast, however, interleaving is a result that may come from applying multiplexing, as is clear from the specification of the above-referenced patent application. Therefore, it is improper to treat multiplexing and interleaving as one and the same thing. While it may be true that Afify employs multiplexing, it is not true that Afify performs or even relates to interleaving.

Likewise, as another example of an aspect of the claim not shown or taught in Afify, claim 1 states: “applying selected groupings read from the memory to a first multiplexer (MUX).” The Examiner, in his Answer (page 4), refers to reformatter 104 of figure 9 of Afify as the first MUX. This may be questionable in and of itself because a reformatter is not necessarily a MUX; however, irrespective of that question or issue, from the description in the patent, **it is clear that 104 does not apply “selected groupings” as called for by the claims.** The patent describes the operation of reformatter 104 in some detail and illustrates its internal circuitry in

figure 12. Again, as just one example supporting Appellant's position, at column 10, lines 59-61, Afify states:

"The outputs of the upper and lower transmit switch memories 100, 102 are provided to both the reformatter A104 and overhead mux 126."

The Examiner even admits this in his Answer on page 6. In particular, the Examiner states:

"[T]he data read from memories 100 and 102 (afify Fig. 9) is read continuously [citing to Afify]..."

Therefore, it is clear that "selected groupings" are not "read from the memory", as called for in the claims. Instead, all the contents of the memorie(s) are provided.

Thus, there are many aspects of claim 1 that are not taught or described in Afify. However, the law is clear that when making a rejection under section 103 of the statute, any modifications to cited patents or other documents to be made in order to meet the claim limitations must come from the prior art. See In re Gorman, 221 USPQ 1125 (Fed. Cir. 1985) (prior art must suggest the desirability of making the modification to produce the claimed invention) Here, the Examiner has failed to supply any other patent or document to provide the missing aspects of the rejected claims. Therefore, the Examiner has failed to meet his burden.

Of course, there are additional problems with the Examiner's rejection beyond the foregoing. For example, as explained in Appellant's brief, pages 7-9, Afify is non-analogous art. The Examiner, in his Answer, page 9, relies on the class and subclass of the patent to dispute this; however, that is insufficient. **The Examiner must apply the Federal Circuit test, and, as Appellant has already shown in his Appeal Brief, under the applicable test Afify is not analogous.** The Examiner's position on page 9 and 11 of his Answer amounts to asserting that any and all forms of multiplexing, regardless of data type, application, implementation, etc., etc. are analogous. This proves too much and, therefore, cannot be the case.

Likewise, the Examiner attempts to "shoehorn" Afify into the limitations of the rejected claims, in addition to the patent being non-analogous. This suggests that the Examiner has, in reality, engaged in hindsight reconstruction, a practice that has been continually and repeatedly condemned by the Federal Circuit. The Examiner responds, on page 12 of his Answer, citing In re McLaughlin, that he is not running a foul of this fundamental prohibition if he does not employ knowledge gleaned only from the applicant's disclosure. While that is a correct statement of the law, **given that Afify is missing several aspects of claim 1 and is non-analogous, as previously discussed, it seems irrefutable that the Examiner has, in fact, gleaned information from Appellant's disclosure, rather than from the prior art.**

The Examiner, in his Answer, also makes much of the terms "FIFO" and "burst," which are employed in the dependent claims. However, because Afify does not render claim 1 obvious for the reasons previously explained, likewise, it cannot render the other dependent claims rejected only on Afify obvious, such as claims 2, 7, and 8, for example. Nonetheless, Appellant

still does not concede the Examiner's positions regarding "FIFO" and "burst." With respect to the term "FIFO," although Appellant agrees that FIFOs are well-known, (Examiner's Answer, page 6), **Appellant does not agree that it is obvious how to use a FIFO to implement the invention as recited in claim 1,** for example.

Likewise, regarding the term "burst," the Appellant, during prosecution, traversed the taking of official notice by the Examiner and continues to disagree with the Examiner's position. The Examiner, in his Answer, page 13, argues that this is now mooted by pages from a textbook supplied by Appellant. However, the Examiner is not correct. As is well-established, the patent claims and specification control over an external source, such as a textbook. See, e.g., Dow Chemical Co. v. Sumitomo Chemical Co., 00-1441, Fed. Cir., decided July 25, 2001 ("[A]ny definition found in or ascertained by a reading of the intrinsic evidence may not be contradicted by any meaning found in dictionaries or technical treatises."); Vitronics v. Conceptronic, 39 USPQ2d 1573, 1578 n. 6. The term "burst" is employed on page 5 of the above-referenced patent application. **It is clear from the usage in the specification that this term is not intended to have the meaning that the Examiner is attempting to impart, but, instead, has a much broader meaning.** The specification specifically discusses burst DRAM. Therefore, reference to a textbook regarding ATM networking to interpret this term, as the Examiner has done, does not appear to be appropriate or logical.

Finally, Appellant addresses the Examiner's arguments regarding claims 4, 5 and 10. The Examiner has asserted that these claims are unpatentable under section 103 of the statute based upon the combination of Afify in light of Dobbins. Because these claims depend from

claim 1, for the Examiner to make a *prima facie* case of unpatentability, Dobbins must address the deficiencies of Afify with respect to claim 1. However, Dobbins fails in this regard. The Examiner relies on Dobbins only because, according to the Examiner, it teaches VLAN tags. Thus, a review of Dobbins reveals that it has no teaching, description, or even suggestion to cure the missing aspects of claim 1 that are not disclosed by Afify. Therefore, the combination, even assuming it were correct, would fail to produce the invention as recited in the rejected claims.

Furthermore, the combination is not proper in any event. In particular, Afify and Dobbins are incompatible technology. Therefore, one of ordinary skill in the art would not even attempt to make the asserted combination. For example, SONEts, as described in Afify are a point-to-point protocol. In contrast, Dobbins deals with a packet switched network in which the protocol is distributed. Under these circumstances, such a combination is not proper technically or legally.

CONCLUSION

Appellant respectfully submits that all the pending claims in this patent application are patentable and request that the Board of Patent Appeals and Interferences overrule the Examiner and direct allowance of all the rejected claims.

Respectfully submitted,

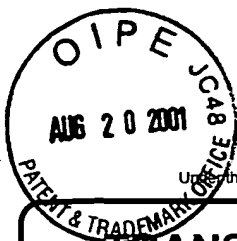
Date: _____

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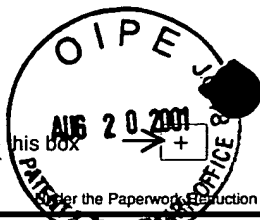
TRANSMITTAL FORM (to be used for all correspondence after initial filing)		Application No.	09/061,017
		Filing Date	April 15, 1998
		First Named Inventor	Scott L. Baker
		Group Art Unit	2732
		Examiner Name	D. Vincent
Total Number of Pages in This Submission	12	Attorney Docket Number	42390P5326

ENCLOSURES (check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form <input checked="" type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Response <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers (for an Application) <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition Routing Slip (PTO/SB/69) and Accompanying Petition <input type="checkbox"/> To Convert a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Small Entity Statement <input type="checkbox"/> Request for Refund	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input checked="" type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input type="checkbox"/> Additional Enclosure(s) (please identify below): <div style="border: 1px solid black; height: 80px; width: 100%;"></div>
Remarks		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	Gregory D. Caldwell, Reg. No. 39,926 BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP
Signature	
Date	August 14, 2001

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FEE TRANSMITTAL for FY 2000

Patent fees are subject to annual revision.

TOTAL AMOUNT OF PAYMENT (\$)

310.00

Complete if Known

Application No. 09/061,017
Filing Date April 15, 1998
First Named Inventor Scott L. Baker
Examiner Name D. Vincent
Group/Art Unit 2732
Attorney Docket Number 42390P5326

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METHOD OF PAYMENT (check one)

1. ☒ The Commissioner is hereby authorized to credit any overpayments to:

Deposit Account Number 02-2666

Deposit Account Name Blakely, Sokoloff, Taylor & Zafman LLP

☒ Charge Any Additional Fee(s) Required Under 37 CFR §§ 1.16, 1.17, 1.18 and 1.20.

☐ Applicant claims small entity status. See 37 CFR 1.27.

2. ☒ Payment Enclosed:

☒ Check ☐ Credit card ☐ Money Order ☐ Other

FEE CALCULATION

1. BASIC FILING FEE

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
101	710	201	355	Utility filing fee	
106	320	206	160	Design filing fee	
107	490	207	245	Plant filing fee	
108	710	208	355	Reissue filing fee	
114	150	214	75	Provisional filing fee	

SUBTOTAL (1) (\$)

2. EXTRA CLAIM FEES

Total Claims	Independent Claims	Multiple Dependent	Extra Claims	Fee from below	Fee Paid

**or number previously paid, if greater. For Reissues, see below

Large Entity		Small Entity		Fee Description
Fee Code	Fee (\$)	Fee Code	Fee (\$)	
103	18	203	9	Claims in excess of 20
102	80	202	40	Independent claims in excess of 3
104	260	204	135	Multiple Dependent claim, if not paid
109	80	209	40	**Reissue independent claims over original patent
110	18	210	9	**Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$)

FEE CALCULATION (continued)

3. ADDITIONAL FEE

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
105	130	205	65	Surcharge - late filing fee or oath	
127	50	227	25	Surcharge - late provisional filing fee or cover sheet.	
139	130	139	130	Non-English specification	
147	2,520	147	2,520	For filing a request for reexamination	
112	920*	112	920*	Requesting publication of SIR prior to Examiner action	
113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action	
115	110	215	55	Extension for response within first month	
116	390	216	195	Extension for response within second month	
117	890	217	445	Extension for response within third month	
118	1,390	218	695	Extension for response within fourth month	
128	1,890	228	945	Extension for response within fifth month	
119	310	219	155	Notice of Appeal	
120	310	220	155	Filing a brief in support of an appeal	310.00
121	270	221	135	Request for oral hearing	
138	1,510	138	1,510	Petition to institute a public use proceeding	
140	110	240	55	Petition to revive - unavoidable	
141	1,240	241	620	Petition to revive - unintentional	
142	1,240	242	620	Utility issue fee (or reissue)	
143	440	243	220	Design issue fee	
144	600	244	300	Plant issue fee	
122	130	122	130	Petitions to the Commissioner	
123	130	123	130	Petitions related to provisional applications	
126	180	126	180	Submission of Information Disclosure Stmt	
581	40	581	40	Recording each patent assignment per property (times number of properties)	
146	710	246	355	Filing a submission after final rejection (37 CFR 1.129(a))	
149	710	249	355	For each additional invention to be examined (37 CFR 1.129(b))	
179	710	279	355	Request for Continued Examination (RCE)	
169	900	169	900	Request for expedited examination of a design application	
Other fee (specify)					
Other fee (specify)					
* Reduced by Basic Filing Fee Paid					
SUBTOTAL (3) (\$)					310.00

SUBMITTED BY

Complete (if applicable)

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Signature		Date	08/14/01		

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